

The ground water monitoring results comparing data from the 1995 EIS and maximum ground water monitoring results from 1995 - 1999 is shown in Table 8-1.20.1. The table shows decreased contaminant levels for most contaminants. The contaminants that show increases are for inorganic salts around the Mud Lake area (not attributable to INEEL actions) and for carbon tetrachloride. Carbon tetrachloride is being addressed through the CERCLA program which is the procedural equivalent of NEPA.

The 1995 EIS showed a dose of 0.60 mrem/yr attributable to the LLW disposal facility through the year 2060. It also stated that results of the preliminary risk assessment indicate that contaminants would not reach the INEEL site boundary exceeding Federal primary drinking water standards through 2005. Additional analysis completed since the 1995 EIS (the HLW & FD EIS, WAG 3 RI/FS, and RWMC PA/CA) confirms the adequacy of the 1995 EIS.

Surface Water

DOE-ID will refine the Flood Plain documentation per 10 CFR 1022. The review determined that the flood plain analysis in 1995 was adequate for safe operation of INEEL facilities.

2.0 INTRODUCTION

In April 1995, the Department of Energy (DOE) and the Department of the Navy, as a cooperating agency, issued the Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Final Environmental Impact Statement (1995 EIS). This document analyzed alternatives for the management of existing and reasonably foreseeable inventories of the Department's spent nuclear fuel through the year 2035. It also included a detailed analysis of environmental restoration and waste management activities at the Idaho National Engineering and Environmental Laboratory (INEEL). This analysis supported facility-specific decisions regarding new, continued, or discontinued environmental restoration and waste management operations through the year 2005.

The Record of Decision (ROD) was signed in June 1995 and documented a number of decisions regarding INEEL operations. In addition to the decisions that were made, decisions on a number of projects were deferred.

DOE National Environmental Policy Act (NEPA) implementing procedures require that an evaluation of site-wide EISs be performed by means of a Supplement Analysis (SA) every five years. The SA is required to contain sufficient information for DOE to determine whether 1) an existing EIS should be supplemented, 2) a new EIS should be prepared, or 3) no further NEPA documentation is required. While the 1995 EIS was not a true site-wide EIS in that a number of programs were not included, most notably reactor operations, this method was used to evaluate the adequacy of the 1995 EIS.

The need for a supplement analysis is triggered by 10 CFR Part 1021, which requires a review of a site-wide EIS every five years. The purpose of the SA is to determine if there have been changes in the basis upon which an EIS was prepared. This provides input for an evaluation of the continued adequacy of the EIS in light of those changes (i.e., whether there are substantial

changes in the proposed action, significant new circumstances, or new information relevant to environmental concerns.) This is not to question the previous analysis or decisions based on that analysis, but whether the environmental impact analyses are still adequate in light of programmatic changes. In addition, the information for each of the projects for which decisions were deferred in the ROD needs to be reviewed to determine if decisions can be made or if any additional NEPA analysis needs to be completed.

The product of the SA is a recommendation to the DOE-ID Manager concerning the adequacy of the INEEL portion of the 1995 EIS. The Programmatic Spent Nuclear Fuel portion of the 1995 EIS is not addressed in the SA because there is no requirement to evaluate a Programmatic EIS. However, the INEEL Spent Nuclear Fuel program and projects identified in the 1995 EIS were evaluated.

This SA addresses the following in identifying whether the 1995 EIS is adequate for describing the potential bounding environmental impacts of INEEL operations.

- 1) Provides basis for decisions on outstanding issues from the 1995 EIS ROD.
- 2) Describes the scope of EISs, EAs, and other NEPA analyses completed in the last five years for Environmental Restoration, Waste Management, Spent Nuclear Fuel, and Infrastructure projects undertaken to support these programs.
- 3) Describes a Change Analysis of the 1995 EIS. Document significant changes to each of the major programs and each of the major environmental disciplines. The change analysis includes:
 - Scope of the previous analysis
 - Methodology
 - Changes in assumptions
 - Whether the analytical tools used in the 1995 EIS are still valid
 - Whether the accident scenarios and probabilities are still accurate and bounding
 - How the current environmental monitoring data compares with what was previously used
 - Cumulative Impacts
 - Changes in regulatory requirements
 - A comparison between actions proposed in the 1995 EIS with the actions that were implemented, deferred, or dropped from consideration
 - Changes in public perception and values.
- 4) Describes an analysis of the alternatives considered and a determination of whether those alternatives still envelope the potential scope of DOE actions and resulting environmental impacts.

The change analysis uses Alternative B in the 1995 EIS as the baseline for the analysis. The option chosen in the ROD was a modified alternative B. From the standpoint of determining whether the existing analysis is bounding, alternative B is sufficiently defined in the 1995 EIS to allow a comparison. Comparing the impacts of programmatic changes against all of the projects analyzed in the 1995 EIS would not result in impacts beyond those previously analyzed. This is because the maximum treatment option (alternative D) analyzed the maximum foreseeable projects and impacts. Any analysis needs that are beyond the scope of

alternative B will be compared against alternative D to determine if these impacts would be beyond those previously analyzed or simply beyond the scope of the 1995 EIS.

The Supplement Analysis uses a date of October 1, 2000 as a cut-off date for programmatic and environmental discipline changes as the best available information.

The approval authority for the project deliverables is the DOE-ID Manager. The action for the Manager is to determine from this analysis one of three options:

- 1) A new EIS is needed
- 2) A supplemental EIS is needed
- 3) No additional EIS is needed

As with the 1995 EIS, the Naval Reactors Idaho Branch Office and DOE-CH, Argonne Group – West are both participating in the project.

3.0 1995 ENVIRONMENTAL IMPACT STATEMENT SCOPE

This section discusses the scope of the 1995 EIS as it relates to INEEL's ER&WM and Spent Nuclear Fuel activities and the timeframe for decisions supported by the 1995 EIS. Activities addressed in the 1995 EIS primarily include those that deal with managing INEEL radioactive (high-level, transuranic, low-level, and mixed) wastes, hazardous waste, industrial waste, and spent nuclear fuel handling and storage activities. Specific activities are also identified as being out of scope of the 1995 EIS. The 1995 EIS provided the analysis required under the NEPA for certain projects required to implement these Programs at the INEEL. The following is a summary of the scope that was evaluated. More detailed information is available in Vol. 2 of the 1995 EIS sections 2.1.2 and 2.2.5 – 2.2.11.

3.1 Environmental Restoration and Waste Management Activities

Waste management activities discussed in the 1995 EIS were evaluated at both the site-wide (by waste stream management) and project-specific levels. The evaluation of the INEEL's waste management program addressed site-wide impacts associated with the treatment, storage, and disposal of wastes generated by ongoing remediation, nuclear energy, energy research, and defense programs. Examples of project-specific analysis related to waste management activities at the INEEL include constructing replacement capacity for high-level waste tanks and evaluating the potential environmental consequences of incineration (for example, the Waste Experimental Reduction Facility).

For environmental restoration, potential impacts at the INEEL were addressed only at the site-wide level. For example, the 1995 EIS evaluated the potential site-wide impacts associated with deactivation, decontamination, and decommissioning facilities scheduled for closure or reuse. Project-specific impacts of activities were not specifically quantified at that time, so they were only generally evaluated. Project-specific impacts of these activities at the INEEL were planned to be quantified and evaluated in the future, as appropriate, as part of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) actions, in accordance with the Federal Facility Agreement and Consent Order. In the 1995 EIS, deactivation, decontamination, and decommissioning were organizationally reflected under the Environmental Restoration program.